**Vibrio cholerae**, Strain CVD 101

**Catalog No. NR-148**
(derived from ATCC® 39540™)

**For research use only. Not for human use.**

**Contributor:**
ATCC®

**Product Description:**

**Bacteria Classification:** Vibrionaceae, Vibrio
**Species:** Vibrio cholerae
**Strain:** CVD 101
**Serogroup:** O:1
**Serotype:** Ogawa
**Biotype:** Classical

**Source:** Derived from the pathogenic Ogawa 395 strain that was isolated from India

**Comment:** Vibrio cholerae (V. cholerae), strain CVD 101 was deposited at ATCC® in 1983 by Dr. James B. Kaper, Professor of Medicine, Center for Vaccine Development, University of Maryland School of Medicine, Baltimore, Maryland. V. cholerae, strain CVD 101 has been genetically modified by deleting the genes encoding the A subunit of cholera toxin.1

V. cholerae is a natural inhabitant of warm aquatic environments and the causative agent of the diarrheal disease cholera. More than 200 O-antigen serogroups have been identified but only O1 and more recently O139 are known to cause epidemic and pandemic cholera.2 Occasionally, there are cholera outbreaks that result from non-O1 and non-O139 serotypes. V. cholerae colonizes the mucosal surface of the small intestines of humans, the only known animal host.3 Cholera has a high lethality if left untreated, and millions have died in the seven pandemics that have occurred since 1817.

Cholera toxin, the toxin-coregulated pilus (TCP) and the central regulatory protein, ToxR, are recognized as significant factors in the pathogenicity of toxigenic strains of V. cholerae serogroups O1 and O139.4

**Material Provided:**
Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Tryptic Soy Broth supplemented with 10% glycerol.

**Note:** If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**
NR-148 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

**Media:**
Tryptic Soy Broth or equivalent
Tryptic Soy Agar or equivalent

**Incubation:**
Temperature: 37°C
Atmosphere: Aerobic

**Propagation:**
1. Keep vial frozen until ready for use; then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tubes and plate at 37°C for 24 hours.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Vibrio cholerae, Strain CVD 101, NR-148."5

**Biosafety Level:** 2


**Disclaimers:**

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References:

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